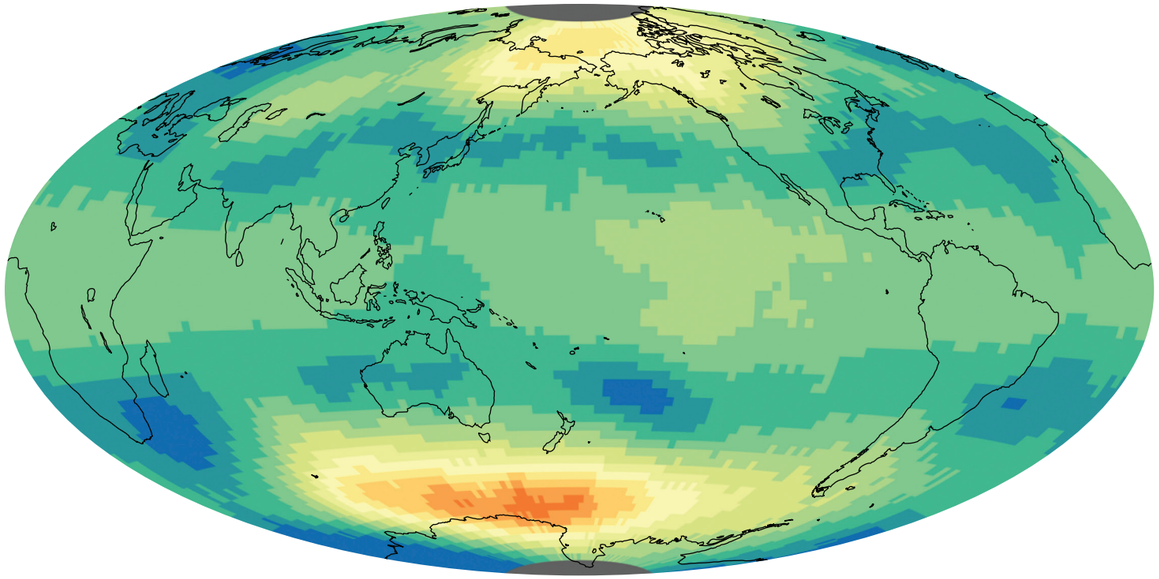
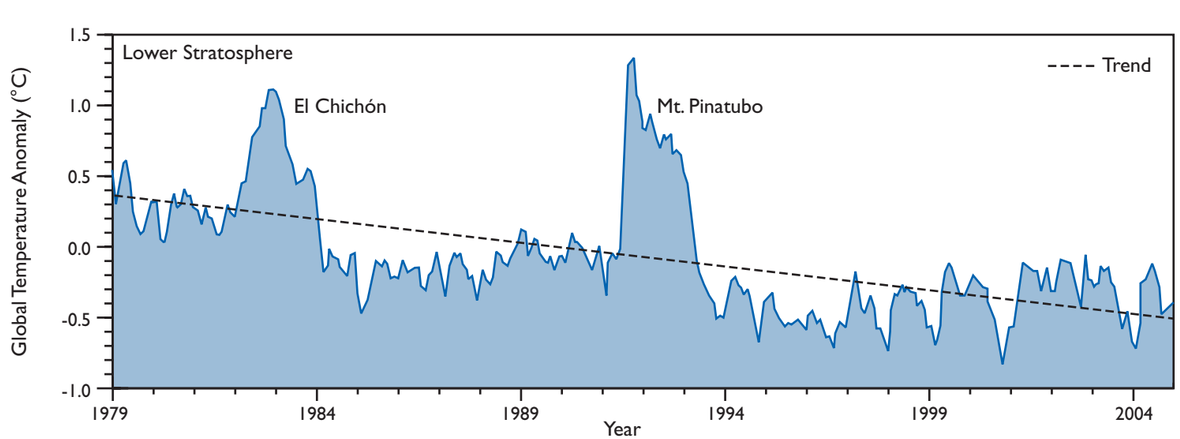
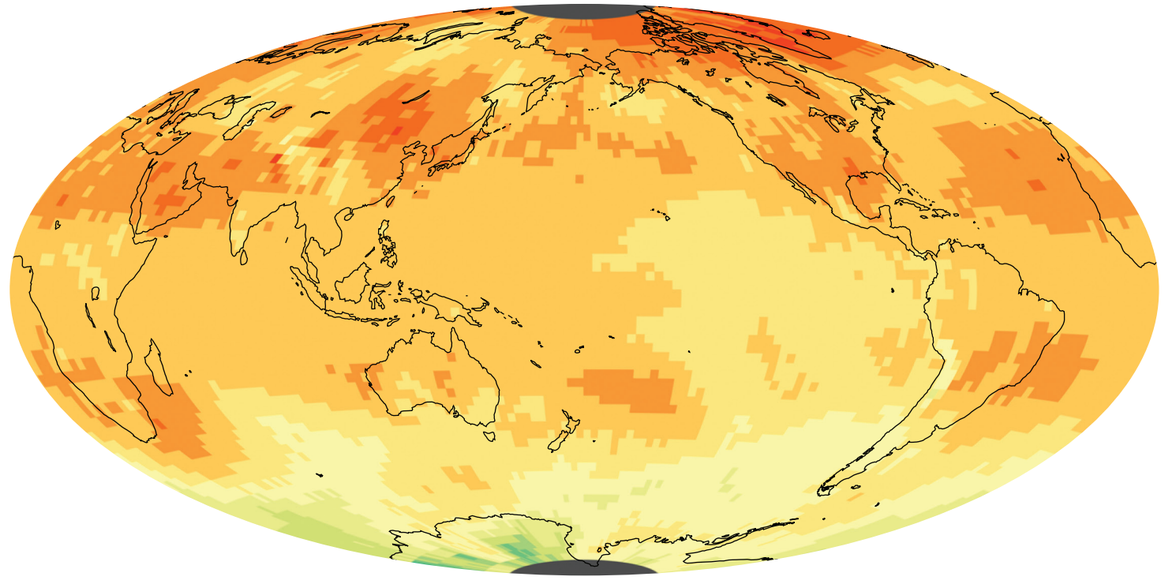


Stratospheric Temperature Trend (°C/decade)

-0.75 0 0.75

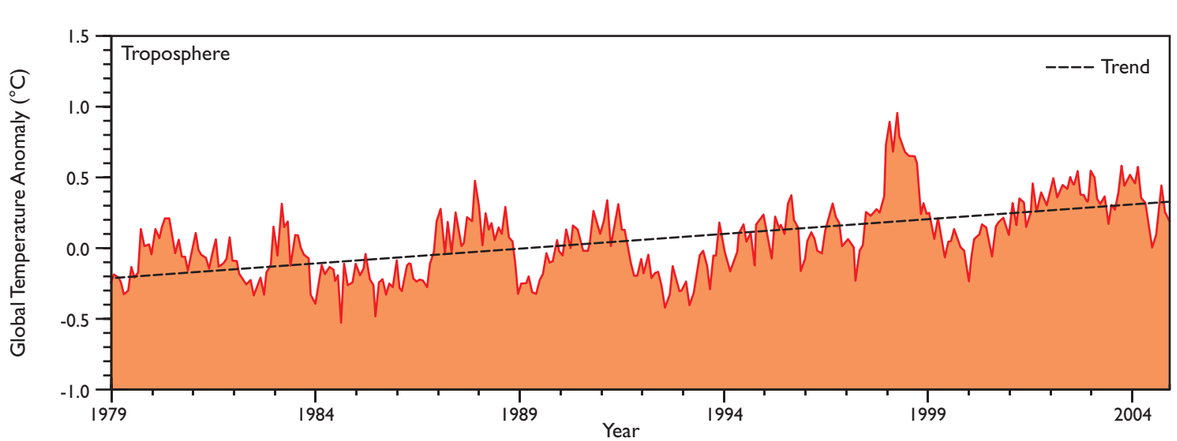


Global distribution of temperature trends in the lower stratosphere (top) from January 1979 to December 2004. The lower panel shows the global mean lower stratospheric temperature changes from 1979 to 2004. The straight line is the linear trend of the data, which shows a cooling of -0.36°C per decade in the lower stratosphere. Two large peaks are due to stratospheric warmings following volcanic eruptions of El Chichón (1982) and Mt. Pinatubo (1991). (Data from the MSU instrument on the Tiros-N and NOAA 6 to NOAA 14 satellites.)



Tropospheric Temperature Trend (°C/decade)

-0.75 0 0.75



Global distribution of temperature trends in the troposphere (top) from January 1979 to December 2004. The lower panel shows the global mean tropospheric temperature changes from 1979 to 2004. The straight line is the linear trend of the data, which shows a warming of +0.19°C per decade in the troposphere. The interannual variabilities in tropospheric temperatures are largely related to El Niño-Southern Oscillation events. (Data from the MSU instrument on the Tiros-N and NOAA 6 to NOAA 14 satellites.)